

Peptide Reconstitution Guidelines

Overview

Many research peptides are supplied in **lyophilized (freeze-dried) form** to improve stability during transport and storage. Prior to laboratory use, peptides must be **reconstituted with an appropriate sterile solvent** to form a research solution.

Proper reconstitution practices help maintain peptide integrity and minimise degradation.

Common Solvents Used in Research

Depending on the peptide and laboratory requirements, common solvents may include:

- **Sterile bacteriostatic water**
- **Sterile water for injection**
- **Sterile saline solution**
- **Dilute acetic acid solutions**

The choice of solvent may depend on the peptide's chemical properties and intended research application.

General Reconstitution Process

Typical laboratory reconstitution procedures include:

1. Prepare a clean working environment.
2. Use sterile equipment and solvents.
3. Introduce solvent slowly into the vial.
4. Allow the peptide powder to dissolve naturally.
5. Gently swirl the vial if necessary.

Avoid vigorous shaking, as this may damage delicate peptide structures.

Mixing Considerations

When dissolving peptides:

- Add solvent slowly along the inside wall of the vial.
- Allow the powder to hydrate before mixing.
- Gently rotate or swirl to assist dissolution.
- Avoid creating foam or bubbles.

Some peptides may require additional time to dissolve completely.

Post-Reconstitution Handling

After reconstitution:

- Store solutions under recommended conditions
- Minimise repeated handling
- Protect from contamination
- Use sterile laboratory techniques when accessing the vial

Prepared solutions are typically more sensitive than lyophilized peptides.

Important Compliance Notice

This material is supplied strictly for laboratory research purposes only.

Peptides referenced in this document are **not approved by the Therapeutic Goods Administration (TGA)** for human or veterinary use.

This document does not provide medical advice, dosing guidance, or administration instructions